



ELECTRONICS, INC.  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089  
<http://www.nteinc.com>

## NTE2645 Silicon PNP Transistor General Purpose Amp

**Absolute Maximum Ratings:**

Collector-Base Voltage, $V_{CBO}$ .....	175V
Collector-Emitter Voltage, $V_{CEO}$ .....	175V
Emitter-Base Voltage, $V_{EBO}$ .....	5V
Collector Current, $I_C$ .....	1A
Total Power Dissipation, $P_T$	
$T_A = +25^\circ\text{C}$ .....	1.0W
Derate linearly .....	5.71mW/ $^\circ\text{C}$
$T_C = +25^\circ\text{C}$ .....	5.0W
Derate linearly .....	28.6mW/ $^\circ\text{C}$
Operating Junction Temperature Range, $T_J$ .....	-65° to +200°C
Storage Temperature Range, $T_{stg}$ .....	-65° to +200°C

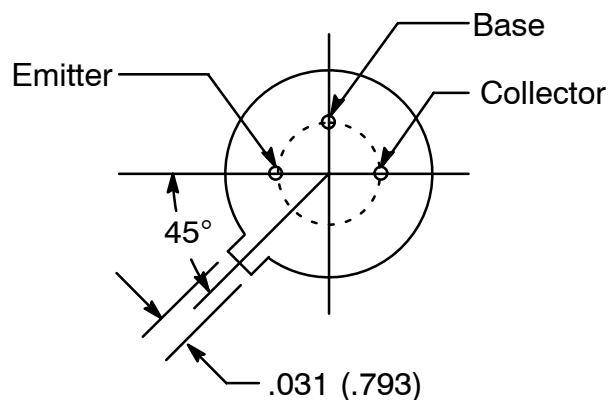
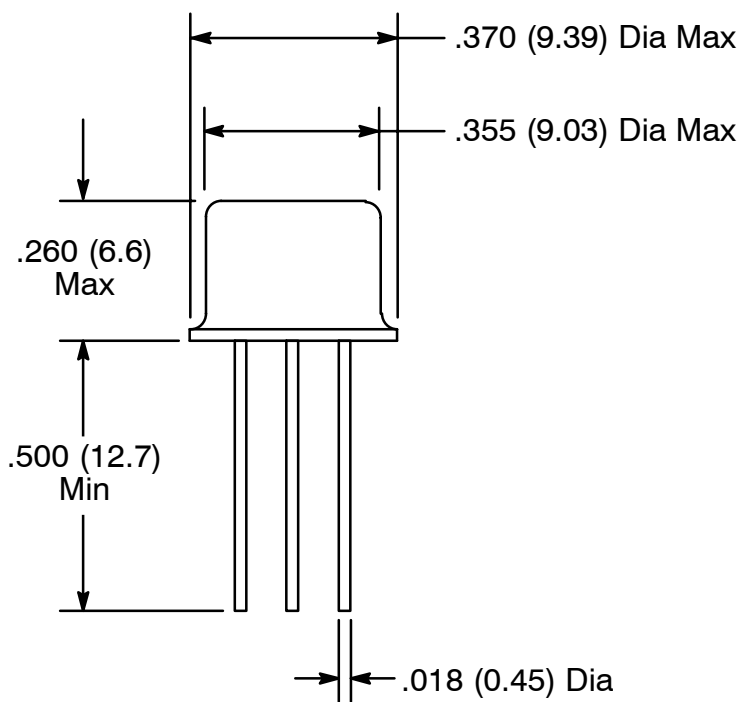
**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit	
<b>OFF Characteristics</b>							
Collector-Emitter Breakdown Current	$V_{(BR)CEO}$	$I_C = 10\text{mA}$	175	-	-	V	
Collector-Base Cutoff Current	$I_{CBO}$	$V_{CB} = 100\text{V}$	-	-	100	nA	
Emitter-Base Cutoff Current	$I_{EBO}$	$V_{EB} = 3\text{V}$	-	-	50	nA	
		$V_{EB} = 5\text{V}$	-	-	10	$\mu\text{A}$	
Collector-Emitter Cutoff Current	$I_{CEO}$	$V_{CE} = 100\text{V}$	-	-	10	$\mu\text{A}$	
<b>ON Characteristics (Note 1)</b>							
Forward-Current Transfer Ratio	$h_{FE}$	$V_{CE} = 10\text{V}$	$I_C = 0.1\text{mA}$	55	-	-	
			$I_C = 1.0\text{mA}$	90	-	-	
			$I_C = 10\text{mA}$	100	-	-	
			$I_C = 50\text{mA}$	100	-	300	
			$I_C = 150\text{mA}$	60	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}, I_B = 1.0\text{mA}$	-	-	0.3	V	
		$I_C = 50\text{mA}, I_B = 5.0\text{mA}$	-	-	0.6	V	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 10\text{mA}, I_B = 1.0\text{mA}$	-	-	0.8	V	
		$I_C = 50\text{mA}, I_B = 5.0\text{mA}$	0.65	-	0.9	V	

Note 1. Pulse test: Pulse Width = 300 $\mu\text{s}$ , Duty Cycle  $\leq$  2.0%.

**Electrical Characteristics (Cont'd):** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
<b>Dynamic Characteristics</b>						
Forward Current Transfer Ratio	$ h_{fe} $	$I_C = 30\text{mA}, V_{CE} = 30\text{V}, f = 100\text{MHz}$	2.0	-	5.8	
	$h_{fe}$	$I_C = 10\text{mA}, V_{CE} = 10\text{V}, f = 1.0\text{kHz}$	80	-	320	
Small-Signal Short-Circuit Input Impedance	$h_{je}$	$I_C = 10\text{mA}, V_{CE} = 10\text{V}, f = 1.0\text{kHz}$	200	-	1200	$\Omega$
Small-Signal Open-Circuit Output Admittance	$h_{oe}$	$I_C = 10\text{mA}, V_{CE} = 10\text{V}, f = 1.0\text{kHz}$	-	-	200	$\mu\text{S}$
Output Capacitance	$C_{obo}$	$V_{CB} = 20\text{V}, I_E = 0, 100\text{kHz} \leq f \leq 1.0\text{MHz}$	-	-	10	pF
Input Capacitance	$C_{ibo}$	$V_{EB} = 1.0\text{V}, I_C = 0, 100\text{kHz} \leq f \leq 1.0\text{MHz}$	-	-	75	pF
Noise Figure	NF	$f = 100\text{Hz}$	-	-	5.0	dB
		$f = 1.0\text{kHz}$	-	-	3.0	dB
		$f = 10\text{kHz}$	-	-	3.0	dB



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Bipolar Transistors - BJT category](#):*

*Click to view products by [NTE manufacturer](#):*

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T](#)  
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)  
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-](#)  
[TL-H](#) [2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)  
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)  
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)